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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE PATENT TRIAL AND APPEAL BOARD

_____

Ex parte PAUL D. KANGAS and DANIEL M. RANCK

_____

Appeal 2015-005414
Application 13/686,987
Technology Center 2600

_____

Before JEFFREY S. SMITH, JOHN F. HORVATH, and
JOSEPH P. LENTIVECH, *Administrative Patent Judges.*

LENTIVECH, *Administrative Patent Judge.*

DECISION ON APPEAL

Appellants[1] seek our review under 35 U.S.C. § 134(a) of the
Examiner's final rejection of claims 1–20, the only claims pending in the
application on appeal. We have jurisdiction over the pending claims under
35 U.S.C. § 6(b).

We affirm.

_____

[1] According to Appellants, the real party in interest is Lenovo Enterprise
Solutions Pte. Ltd. App. Br. 2.

STATEMENT OF THE CASE

Appellants' Invention

Appellants' invention generally relates to using augmented reality to examine a real-world computing system. Spec. ¶ 1. Claim 1, which is illustrative, reads as follows:

> 1. A method for virtually seeing inside a computer system, the method comprising:
>
> identifying, via a mobile device, a physical computing system;
>
> retrieving a three dimensional model corresponding to the physical computing system, wherein the three dimensional model includes an arrangement of internal components; [hereinafter the "retrieving limitation"]
>
> receiving real-time system information from the physical computing system;
>
> modifying an image of the three dimensional model based on the real-time system information; [hereinafter the "modifying limitation"] and
>
> displaying, on the mobile device, at least a portion of the modified image, including one or more internal components. [hereinafter the "displaying limitation"]

Rejections

Claims 1–3, 7–13, and 16 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of S. Deffeyes, *Mobile Augmented Reality in the Data Center*, IBM J. Res. & Dev., Vol. 55, No. 5, paper 5 (2011) ("Deffeyes") and Tison et al. (US 2012/0249588 A1; published Oct. 4, 2012) ("Tison"). Final Act. 7–11.

Claims 4–6 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Deffeyes, Tison, and Kolin et al. (US 2012/0005344 A1; published Jan. 5, 2012) ("Kolin"). Final Act. 11–12.

Claim 14 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Deffeyes, Tison, and Castellani et al. (US 8,621,362 B2; issued Dec. 31, 2013) ("Castellani"). Final Act. 12–13.

Claim 15 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Deffeyes, Tison, Castellani, Haran et al. (US 2010/0163731 A1; published July 1, 2010) ("Haran"), and Schulz et al. (US 6,611,141 B1; issued Aug. 26, 2003) ("Schulz"). Final Act. 13–14.

Claims 17–19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Deffeyes, Tison, and Lemelson et al. (US 2005/0206538 A1; published Sept. 22, 2005) ("Lemelson"). Final Act. 14–15.

Claim 20 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over the combination of Deffeyes, Tison, Lemelson, and Ahmed (US 2005/0252984 A1; published Nov. 17, 2005). Final Act. 16–17.

ANALYSIS

Claim 1

RETRIEVING LIMITATION

Contention 1:

Appellants contend the Examiner erred in finding the combination of Deffeyes and Tison teaches or suggests "retrieving a three dimensional model corresponding to the physical computing system, wherein the three dimensional model includes an arrangement of internal components," as

recited in claim 1. App. Br. 5–11; Reply Br. 3. Initially, Appellants contend the rejection is improper. App. Br. 5, 7. Appellants contend the Examiner fails to provide articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. App. Br. 5, 10. With respect to this contention, Appellants argue:

> While the rejection cites three sections and one Figure of Deffeyes, the rejection fails to articulate reasoning explaining how Deffeyes teaches "retrieving a three dimensional model corresponding to the physical computing system." The key to supporting any rejection under 35 U.S.C. § 103 is the clear articulation of the reason(s) why the claimed invention would have been obvious. The analysis supporting a rejection under 35 U.S.C. § 103 should be made explicit. "Rejections on obviousness cannot be sustained with mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness."

App. Br. 5 (citing *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007); *In re Kahn*, 441 F.3d 977, 988 (Fed. Cir. 2006)) (internal citations omitted). Appellants make similar arguments regarding the Examiner's findings with respect to the teachings of Tison. *See* App. Br. 10. Appellants further argue the Examiner failed to establish a prima facie case of obviousness. App. Br. 7, 10–11 (citing *In re Jung*, 637 F.3d 1356, 1362 (Fed. Cir. 2011); *Hyatt v. Dudas*, 492 F.3d 1365, 1369 (Fed. Cir. 2007); *In re Piasecki*, 745 F.2d 1468, 1472 (Fed. Cir. 1984); *Chester v. Miller*, 906 F.2d 1574, 1578 (Fed. Cir. 1990); 35 U.S.C. § 132).

We do not find Appellants' contentions persuasive. "[T]he prima facie case is merely a procedural device that enables an appropriate shift of the burden of production." *Hyatt*, 492 F.3d at 1369. The Examiner satisfies

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his or her initial burden of production by "adequately explain[ing] the shortcomings it perceives so that the applicant is properly notified and able to respond." *Hyatt,* 492 F.3d at 1370. In other words, the Examiner meets the procedural burden of establishing a prima facie case when the rejection satisfies 35 U.S.C. § 132 by "notify[ing] the applicant ... [by] stating the reasons for [its] rejection, or objection or requirement, together with such information and references as may be useful in judging of the propriety of continuing the prosecution of [the] application." *Jung,* 637 F.3d at 1362 (citing 35 U.S.C. § 132). 35 U.S.C. § 132 "is violated when a rejection is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection." *Chester,* 906 F.2d at 1578.

35 U.S.C. § 132 does not mandate that in order to establish a prima facie case, the Examiner must explicitly preempt every possible response to a rejection. 35 U.S.C. § 132 merely ensures that an applicant at least be informed of the broad statutory basis for the rejection of his claims, so that the applicant may determine what the issues are on which he or she can or should produce evidence. *Chester,* 906 F.2d at 1578. All that is required of the Examiner to meet the prima facie burden of production is to set forth the statutory basis of the rejection and the reference or references relied upon in a sufficiently articulate and informative manner as to meet the notice requirement of § 132. *Jung,* 637 F.3d at 1363. Here, the Examiner's identification of the theory of invalidity (obviousness), the identification of the prior art basis for the rejections (Deffeyes and Tison), the identification of where each limitation of the rejected claims is taught or suggested in the prior art references (Final Act. 7), and the articulation of reasoning for combining the references (Final Act. 8) is sufficient to meet this burden.

Jung, 637 F.3d at 1363.

We are not persuaded by Appellants' contention that the Examiner failed to provide articulated reasoning (App. Br. 5) explaining how the cited portions of Deffeyes teach the retrieving limitation because the authority relied upon by Appellants relates to the question of obviousness (e.g., whether it is obvious to combine the teachings of Deffeyes and Tison), not to whether or how Deffeyes teaches the retrieving limitation. *See KSR*, 550 U.S. at 418:

> Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art, all in order to determine whether there was an apparent reason to combine the known elements in the fashion claimed by the patent at issue. To facilitate review, this analysis should be made explicit.

(citing *Kahn,* 441 F.3d at 988)). Regarding the combination of Deffeyes and Tison, the Examiner finds:

> One of ordinary skill in the art at the time of the invention would have found obvious combining Deffeyes and Tison, thereby providing within the 3D augmented reality view of Deffeyes real-time information from the hardware, and updating the display presented to an operator, thereby allowing the operator to work with current rather than stale information, and also providing 3D information of the internal components with a device, thereby, as taught by Tison allowing the hardware to be observed without having to open the device.

Final Act. 8. As such, the Examiner has provided articulated reasoning with some rational underpinning to support the legal conclusion of obviousness.

Contention 2:

Regarding the Examiner's findings with respect to the teachings of the applied references, Appellants contend: 1) Deffeyes fails to teach or suggest "retrieving a three dimensional model corresponding to the physical computing system" (App. Br. 5); and 2) Tison fails to teach or suggest "that the three dimensional model includes an arrangement of internal components" (App. Br. 9). Appellants argue Deffeyes teaches retrieving data and information about assets and not retrieving a three dimensional model, as required by claim 1. App. Br. 5–7 (citing Deffeyes, Abstract; Mobile Augmented Reality in the Data Center Project section; Architecture section; Indoor Multimarker Tracking section; Augmentation Interaction section; Conclusion). Appellants further argue Deffeyes' reference to 3-D visualization and (x, y, z) location data does not mean that same thing as the claimed "**three dimensional model** corresponding to the physical computing system." App. Br. 7; Reply Br. 3. According to Appellants, Figure 1 of Deffeyes depicts red blocks forming a visual overlay of data center assets on top of assets in an IBM iDataPlex rack. App. Br. 7 (citing Deffeyes, Fig. 1). Appellants argue the depicted visual overlay "is not a 'three dimensional model corresponding to the physical computing system,'" as required by claim 1. App. Br. 7–8.

We do not find Appellants' contention persuasive. Regarding the disputed limitation, the Examiner finds Deffeyes teaches using (x, y, z) location data to help position the 3-D visualization of each asset correctly on top of the rack and, therefore, teaches or suggests "retrieving a three dimensional model corresponding to the physical computing system," as recited in claim 1. Ans. 2–3. We find nowhere in Appellants' Briefs a

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substantive response regarding the cited findings made by the Examiner. Appellants offer no explanation or reasoning as to how or *why* the Deffeyes' teaching of positioning a 3-D visualization of each asset correctly on top of the rack, based on that asset's (x, y, z) location data, fails to teach or suggest the disputed limitation. *See* 37 C.F.R. § 41.37(c)(1)(iv) ("The arguments shall explain *why the examiner erred* as to each ground of rejection contested by [A]ppellant . . . . [A]ny arguments or authorities not included in the appeal brief will be refused consideration by the Board for purposes of the present appeal.") (Emphasis added.). Appellants do not provide an analysis of the cited section along with a showing of error in the Examiner's reliance thereupon. *See* App. Br. 6–7; Reply Br. 3. Instead, Appellants merely contend Deffeyes' teachings of "3-D visualization" and "(x, y, z) location data" "still do not disclose 'a **three dimensional model** corresponding to the physical computing system," as recited in claim 1. App. Br. 7. Such a response to the Examiner's findings is insufficient to persuade us of Examiner error, as mere attorney arguments and conclusory statements that are unsupported by factual evidence are entitled to little probative value. *In re Geisler*, 116 F.3d 1465, 1470 (Fed. Cir. 1997); *see also In re De Blauwe*, 736 F.2d 699, 705 (Fed. Cir. 1984); *Ex parte Belinne*, No. 2009-004693, slip op. at 7–8 (BPAI Aug. 10, 2009) (informative); *see also In re Lovin*, 652 F.3d 1349, 1357 (Fed. Cir. 2011).

Contention 3:

Appellants further argue Tison fails to teach or suggest that the three dimensional model includes an arrangement of internal components, as required by claim 1. App. Br. 9, 11. In particular, Appellants argue:

>Tison does not disclose a three dimensional model. In paragraph [0033], Tison discloses "[i]n the embodiment of FIG. 5, a portable device 50 is used to display an AR view 52 of hardware installed within a zone box 54 without needing to physically open the zone box 54." (Tison, para. 33, lines 3-5). Furthermore, a QR code within view of the camera "allows the AR software to *display an image* along with other information regarding the hardware stored within the zone box 54." (Tison, para. 33, lines 8-12). The Applicant asserts that Tison's teaching of "display an image" fails to disclose the use of "a three dimensional model."

App. Br. 11. Appellants further argue Tison's teaching of displaying an image along with other information regarding the hardware stored within the zone box does not teach or suggest that the three dimensional model includes an arrangement of internal components or that the modified image includes one or more internal components, as required by claim 1. Reply Br. 5. Appellants contend Tison, instead, teaches the display of information over an image of the components. *Id.*

We do not find Appellants' contention persuasive. Initially, we note the Examiner relies on the combination of Deffeyes and Tison for teaching or suggesting the disputed limitation. *See* Ans. 4–5. Appellants' contention fails to address the combined teachings of the references and, therefore, is unpersuasive of error. *See In re Merck & Co. Inc.*, 800 F.2d 1091, 1097 (Fed. Cir. 1986). We note for emphasis that Tison teaches that Figure 5 depicts an embodiment using a portable device to display an AR view of hardware installed within a zone box without needing to physically open the zone box. Tison ¶ 33. Tison further teaches that AR data, such as the image display in Figure 5 (i.e., the AR view of the hardware installed within the zone box) can be acquired by the portable device via communication with a database. Tison ¶ 34. Tison teaches enabling more efficient data center

construction by using construction information, such as AutoCAD drawings and HVAC drawings, to allow installers to visually see directionally where and how components should be deployed. Tison ¶ 31. Appellants' Specification describes CAD models and engineering drawings as examples of three dimensional models. Specification Spec. ¶ 37. As such, the combination of Deffeyes and Tison teaches or suggests "retrieving a three dimensional model corresponding to the physical computing system, wherein the three dimensional model includes an arrangement of internal components," as recited in claim 1.

For the foregoing reasons, we are not persuaded the Examiner erred in finding the combination of Deffeyes and Tison teaches or suggests the disputed limitation.

MODIFYING AND DISPLAYING LIMITATIONS

Contention 4:

Appellants contend the Examiner erred in finding the combination of Deffeyes and Tison teaches or suggests "modifying an image of the three dimensional model based on the real-time system information; and displaying, on the mobile device, at least a portion of the modified image, including one or more internal components," as recited in claim 1. App. Br. 8–12; Reply Br. 4. Initially, Appellants contend the rejection is improper. App. Br. 8. Appellants argue the Examiner fails to provide articulated reasoning explaining how Deffeyes teaches modifying an image of the three dimensional model and displaying, on the mobile device, at least a portion of the modified image, as recited in claim 1. App. Br. 8 (citing

Kahn, 441 F.3d at 988; *KSR*, 550 US at 418). Appellants further argue the
Examiner failed to establish a prima facie case of obviousness. App. Br. 9,
11–12 (citing *Jung*, 637 F.3d at 1362; *Hyatt v. Dudas*, 492 at 1369; *Piasecki,*
745 F.2d at 1472; *Chester v. Miller*, 906 F.2d at 1578; 35 U.S.C. § 132).
Appellants argue the Examiner "fails to cite any evidence or provide any
reasoning regarding the claim limitation of 'modifying an image of the three
dimensional model *based on the real-time system information.*'" App.
Br. 11 (citing Final Act. 7).

Appellants' contentions are similar to the contentions discussed *supra*
with respect to contention 1. Accordingly, we are unpersuaded the
Examiner erred for the reasons discussed above regarding contention 1.

Contention 5:

Regarding the Examiner's findings with respect to the teachings of
Deffeyes and Tison, Appellants contend Deffeyes fails to teach or suggest
"modifying an image of *the three dimensional model*" and "displaying, on
the mobile device, at least a portion of the modified image." App. Br. 8.
Appellants argue Deffeyes does not teach or suggest a three-dimensional
model corresponding to a physical computing system and, therefore,
Deffeyes does not teach or suggest the claimed "modifying" and
"displaying." App. Br. 8. According to Appellants, Deffeyes, instead,
teaches "[s]ince the data center's *3-D location data* is always transformed
into a 2-D screen space to be displayed on the device, mapping 2-D touch
events to assets that have been positioned and scaled to fit into the 3-D scene
requires extra work in the mobile application." App. Br. 8–9 (citing
Deffeyes, Augmentation Interaction). Appellants argue:

The highlighted section (Deffeyes, section "Augmentation Interaction", second paragraph, lines 10-16) says "Since each asset was rendered in a unique color, the pixel color determines which asset the user touched on the screen. Once the mobile application knows which asset the user touched, that asset can be highlighted during the normal visible rendering pass. Figure 1 shows an asset highlighted in the mobile display after detecting a touch event."

The Appellant asserts that the foregoing section should be read in light of the previous paragraph (See Deffeyes, section "Augmentation Interaction", first paragraph), which was cited in the Appeal Brief at page 6, lines 20-25. The Appellant further asserts that highlighting an asset with a unique color does not disclose "modifying an image of the three dimensional model."

Reply Br. 4.

We do not find Appellants' contentions' persuasive. Appellants' Specification teaches that adding descriptive text or symbols, drawing a component in a different color, and highlighting a component are example modifications that may be performed. Spec. ¶¶ 41–42. As discussed *supra*, Deffeyes teaches displaying a three dimensional visualization (e.g., an image of a three dimensional model). As found by the Examiner, and acknowledged by Appellants, Deffeyes teaches highlighting the three dimensional visualization of an asset in a unique color. Deffeyes, Augmentation section. As such, Deffeyes teaches or suggests the disputed limitations.

CONCLUSION

For the foregoing reasons, we are unpersuaded the Examiner erred in rejecting claim 1; and claims 2 and 10 which depend from claim 1 and are not argued separately with particularity.

Claims 3, 7–9, 11–13, and 16

Appellants contend the rejection of claims 3, 7–9, 11–13, and 16 is improper because the Examiner fails to articulate reasoning explaining how the references teach the limitations of these claims. App. Br. 12.

Appellants' contention is similar to the contentions discussed *supra* with respect to contention 1. Accordingly, we are unpersuaded the Examiner erred for the reasons discussed regarding contention 1.

CLAIM 7

Claim 7 depends from claim 1 and recites "wherein said modifying the image of the three dimensional model based on the real-time system information comprises, rearranging one or more internal components of the three dimensional model." Appellants contend the combination of Deffeyes and Tison fails to teach or suggest the limitations recited in claim 7 because neither references teaches or suggests the use of a three dimensional model. App. Br. 12. Appellants further contend the Examiner fails to articulate any reasoning explaining how the references teach or suggest "rearranging one or more internal components of the three dimensional model," as recited in claim 7. *Id.* Appellants contend "[i]t is the examiner's duty to show *prima facie* obviousness" and that Appellants are "not expected to provide reasons that a reference doesn't teach what a reference does not teach." Reply Br. 7.

In rejecting claim 7, the Examiner states "*see claim 1; see Augmentation Interaction in Deffe[ye]s.*" Final Act. 8–9. The Examiner clarifies in the Final Office Action and the Answer that "see claim 1" refers to the sections of Deffeyes and Tison cited in the rejection of claim 1. Final Act. 4; Ans. 5–6. Appellants offer no explanation or reasoning as to how or

why the cited portions of Deffeyes and Tison fail to teach or suggest the disputed limitation and, therefore, we are unpersuaded of Examiner error. *See* 37 C.F.R. § 41.37(c)(1)(iv).

CLAIM 8

Claim 8 depends from claim 1 and recites "wherein said displaying at least the portion of the modified image, including one or more internal components, comprises, displaying the modified image from the perspective of the mobile device relative to the physical computing system." According to Appellants, the Examiner relies on claims 1 and 2 of Tison for teaching or suggesting the limitations of claim 8. App. Br. 13 (citing Final Act. 9). Appellants contend:

> [C]laim 1 of Tison refers to a system for reporting data about a network datacenter to a user, where the system comprises an appliance, "said appliance providing said data in combination with a real-time visual depiction of datacenter hardware, such that said data view is visually overlaid with said visual depiction of datacenter hardware in an augmented reality overlay." (Tison, claim 1). The Applicant asserts that Tison's "real-time visual depiction of datacenter hardware" is not a three-dimensional model. Rather, Tison teaches a handheld device combining a camera and a video display are "used to combine a *real-world view as seen by a camera* with a computer-provided overlay of data or images relevant to the real-world view." (Tison, paragraph 16, lines 6-11).
>
> The Applicant's claim 8 refers to "the modified image", which has antecedent basis in "modifying an *image of the three dimensional model* based on the real-time system information." Furthermore, Tison fails to disclose "displaying the modified image from the perspective of the mobile device relative to the physical computing system."

> The Response to Arguments section of the Final Office
> Action dated Nov. 14, 2014 states that the rejection should have
> referred to the arguments made in support of the rejections of
> Applicant's claims 1 and 2. Accordingly, the Appellant reasserts
> its arguments made above in support of claims 1 and 2.

App. Br. 13; *see also* Reply Br. 7.

In rejecting claim 8, the Examiner states *"see claims 1 and 2 and
sections cited therein."* Final Act. 9. The Examiner clarifies in the Final
Office Action and the Answer that "see claims 1 and 2 and sections cited
therein" refers to the sections of Deffeyes and Tison cited in the rejection of
claims 1 and 2. Final Act. 4–5; Ans. 6. Appellants offer no explanation or
reasoning as to how or *why* the cited portions of Deffeyes and Tison fail to
teach or suggest the disputed limitation and, instead, rely on the arguments
presented for the patentability of claim 1. App. Br. 13; Reply Br. 7.
Accordingly, we are unpersuaded the Examiner erred in rejecting claim 8 for
the reasons discussed *supra* with respect to claim 1.

CONCLUSION

For the foregoing reasons, we are unpersuaded the Examiner erred in
rejecting claims 3, 7–9, 11–13, and 16.

Claims 4–6

Regarding the rejection of claims 4–6 generally, Appellants contend
the rejection of these claims is improper because the Examiner fails to
articulate reasoning explaining how the references teach the limitations of
the claims. App. Br. 16.

Appellants' contentions are similar to those discussed with respect to contention 1. Accordingly, we find Appellants' contention unpersuasive for the reasons discussed *supra* with respect to contention 1.

CLAIM 4

Claim 4 depends from claim 1 and recites "wherein said receiving the real-time system information comprises: accessing a service processor of the physical computing system; and requesting system information from the service processor." Appellants contend the combination of Deffeyes, Tison, and Kolin fails to teach or suggest the limitations of claim 4 because "Kolin fails to mention 'a service processor.'" App. Br. 15; *see also* Reply Br. 9.

Appellants' Specification provides:

> [H]ardware-based service processors, also known as management processors, are microcontrollers or specialized processors designed to work with hardware instrumentation and systems management software to identify problems within a system. Service processors may also allow remote management of the system. Service processors may alert specified individuals when error conditions occur in a specific managed system. A service processor may allow a user to: monitor the system's sensors, view event logs, be apprised of faults, collect performance and fault information, and operate and/or manage the system remotely.

Spec. ¶ 2. Kolin relates to a system for managing physical and virtual inventory in a data center. Kolin, Abstract. Kolin teaches that the system includes a rack controller for reading and storing data from various sensors. Kolin ¶ 32. Kolin teaches that the collected data may include inventory data such as data indicating that a blade has been inserted into any slot in any smart rack. Kolin ¶¶ 40–41. Kolin teaches that the rack controller can monitor and report the status of the power supply for the rack. Kolin ¶ 32.

Regarding the provision of the data to the inventory management system, Kolin further teaches that the inventory management system may retrieve the inventory data from the rack controller. Kolin ¶ 40. As such, the combination of Deffeyes, Tison, and Kolin teaches or suggests the disputed limitations.

CLAIM 5

Claim 5 depends from claim 1 and recites "wherein said modifying the image of the three dimensional model based on the real-time system information comprises, indicating one or more failing internal components or internal components experiencing errors." Appellants contend the combination of Deffeyes, Tison, and Kolin fails to teach or suggest the limitations of claim 5 because "Kolin fails to mention a 'three dimensional model.'" App. Br. 15.

We do not find Appellants' contention persuasive. The Examiner relies on Deffeyes, not Kolin, for teaching the claimed "three dimensional model." Appellants' contention fails to address the combined teachings of the references and, therefore, is unpersuasive of error. *See Merck & Co. Inc.*, 800 F.2d at 1097.

CLAIM 6

Claim 6 depends from claim 1 and recites "wherein said modifying the image of the three dimensional model based on the real-time system information comprises, indicating a missing internal component." Appellants contend the combination of Deffeyes, Tison, and Kolin fails to teach or suggest the limitations of claim 6 because "Kolin fails to mention

'modifying the image of the three dimensional model.'" App. Br. 15. Appellants contend "[d]isplaying data is not the same as displaying a three dimensional model, and modifying data is not the same as modifying an image of a three dimensional model." *Id.*

Nonobviousness cannot be established by attacking the references individually when the rejection is predicated upon a combination of prior art disclosures. *See Merck & Co. Inc.*, 800 F.2d at 1097. Here, the Examiner relies on the combination of Deffeyes, Tison, and Kolin for teaching or suggesting the disputed limitation. Final Act. 12. As such, Appellants' contentions are unpersuasive of error.

CONCLUSION

For the foregoing reasons, we are unpersuaded the Examiner erred in rejecting claims 4–6.

Claim 12

Regarding the rejection of independent claim 12, Appellants present substantially the same arguments as those previously discussed for patentability of claim 1 above. *See* App. Br. 13–14. Accordingly, we are not persuaded the Examiner erred in rejecting claim 12, and claim 16 which depends from claim 12 and is not argued separately, for the reasons discussed *supra* with respect to claim 1.

Claim 13

Claim 13 depends from claim 12 and recites "wherein said displaying the image of the three dimensional model corresponding to a computer

system in line-of-sight with the mobile device comprises: receiving an image of the computer system via a camera attached to the mobile device; manipulating size and perspective of the three dimensional model image to match the image of the computer system; and displaying the manipulated image." According to Appellants, the Examiner relies on claim 12 of Tison for teaching or suggesting the limitations recited in claim 13. App. Br. 15 (citing Final Act. 11). Appellants provide a recitation of Tison's claim 12 and state the claim does not teach or suggest the limitations recited in claim 13. *See id.* Appellants further contend:

> The rejection of claim 13 says "see claim 12 and sections cited therein", and the rejection of claim 12 says "see claim 1, see section Computer vision-based mobile augmented reality, section Architecture and section Indoor multimarker tracker **in Deffeyes**."

> The Appellant's claim 13 includes three steps that are not included in either independent claim 12 or independent claim 1. Accordingly, the rejection of claims 1 and 12 could not possibly address the limitations of claim 13, and the rejection fails to establish *prima facie* obviousness.

Reply Br. 8.

We do not find Appellants' contentions persuasive. As discussed *supra*, the Examiner's identification of the theory of invalidity (obviousness), the identification of the prior art basis for the rejections (Deffeyes and Tison), the identification of where each limitation of the rejected claims is taught or suggested in the prior art references (e.g., the sections relied on for rejecting claim 12), and the articulation of reasoning for combining the references is sufficient for establishing a prima facie case of obviousness. *Jung*, 637 F.3d at 1363.

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Claims 14, 15, and 17–20

Claims 14, 15, and 17–20 stand rejected under 35 U.S.C. § 103(a) based on Deffeyes, Tison, and various additional references. Appellants do not argue claims 14, 15, and 17–20 with particularity but, instead, rely on the arguments presented for patentability of claim 12. Accordingly, we are not persuaded the Examiner erred in rejecting claims 14, 15, and 17–20 for the reasons discussed *supra* with respect to claim 12.

DECISION

We affirm the Examiner's rejections of claims 1–20 under 35 U.S.C. § 103(a).

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED